

AMENDMENTS TO THE SPECIFICATION

Please replace Paragraphs [0001], [0030] and [0032] with the following paragraphs rewritten in amendment format:

[0001] In the interval between power control commands, a second control loop is employed by the mobile terminal to maintain the transmit EIRP at the commanded level. The second closed control loop is required for stabilizing the transmit EIRP during rapid movement and/or attitude changes of the mobile platform. The second closed control loop thus reduces the power control errors caused by the round trip delay between the ground-based central controller and the mobile terminal, which is approximately 0.5 seconds, round trip.

[0002] In the interval between power control commands, a second control loop is employed by the mobile terminal to maintain the transmit EIRP at the commanded level. The second closed control loop is required for stabilizing the transmit EIRP during rapid movement and/or attitude changes of the mobile platform. The second closed control loop thus reduces the power control errors caused by the round trip delay between the ground-based central controller and the mobile terminal, which ~~are~~ is approximately 0.5 seconds, round trip.

[0003] In a preferred embodiment the present invention also makes use of a "reverse calculation" method for more accurately determining the PSD contribution of each mobile terminal. The "reverse calculation" method is a much more accurate method of determining aircraft PSD than "forward calculating" mobile terminal PSD by using an estimate of transmit EIRP made by the mobile terminal. In practice, it is both difficult and

expensive for the mobile terminal to accurately estimate transmit EIRP. So the invention uses a novel method of “reverse calculating” mobile terminal EIRP by knowing the receive E_b/N_0 at the ground station and working backwards through the link to determine the corresponding transmit EIRP of the mobile terminal. Once the transmit EIRP is determined, the PSD along the GEO plane and off of the GEO orbit plane can be determined in the manner described below.